## Abstract

A connecting unit for use in a system comprising a 'stack' of network communication units having a cascade connection has three ports having lines for forwarding and receiving data packets and for forwarding and receiving control messages. The connecting unit increments a first signal value defining an identification number received by way of a control message at a first port, provides the received signal value by way of a control message to the third port and provides the incremented signal value by way of a control message to the second port. The connecting unit also receives a second signal value defining an active unit count by way of a control message at the first port and provides the second signal value, incremented or not in dependence on a control message received at the third port, in a control message at the second port. The first signal values (UnitIDs) are used to establish the numbering of the units in the stack and the second signal values are used to compute a count of the 'active' units in the stack.

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